

## BAB VII

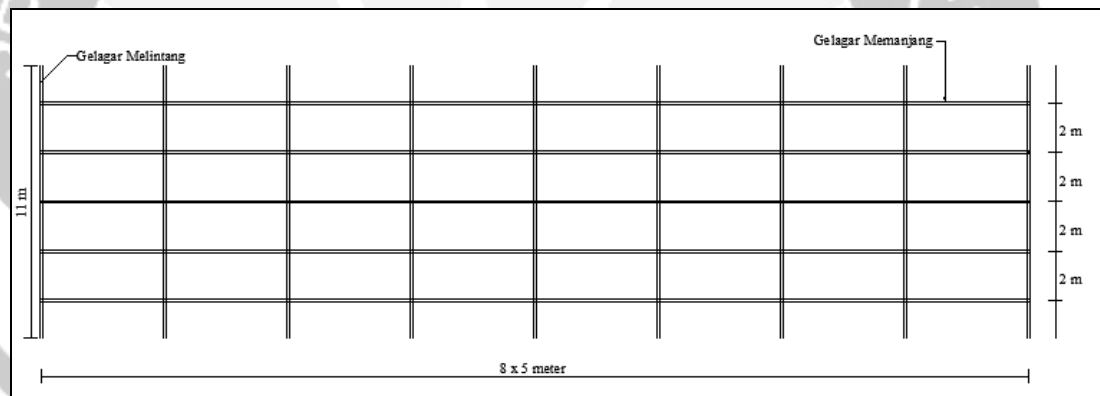
### KESIMPULAN DAN SARAN

#### 7.1. Kesimpulan.

Panjang total jembatan dalam perancangan jembatan ini adalah 80 m. Jembatan ini dibagi menjadi 2 bentang yaitu 40 m dan 40 m. Dari analisis jembatan didapatkan beberapa kesimpulan :

##### 1. Struktur atas

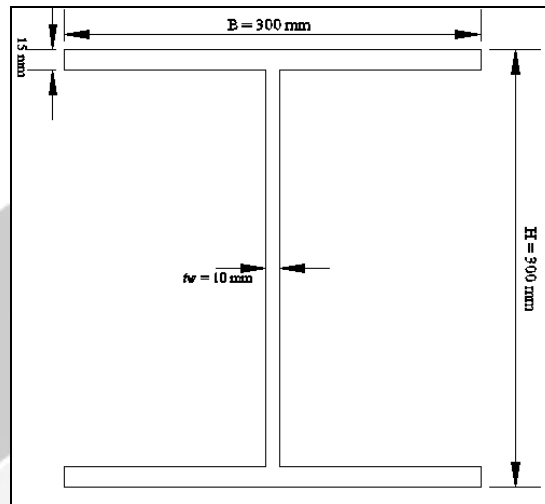
##### a. Perencanaan jembatan rangka :



Gambar 7.1 Gelagar Memanjang dan Melintang Jembatan

##### b. Perencanaan gelagar memanjang

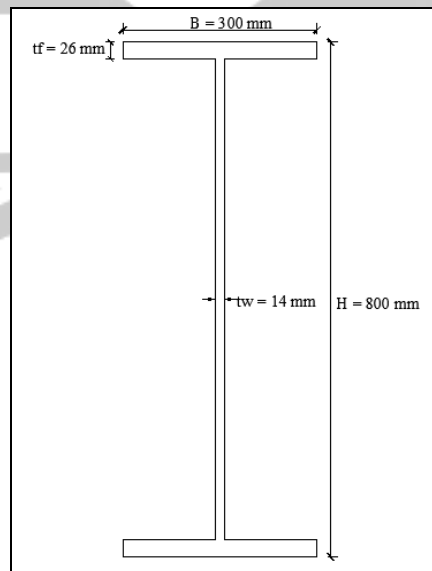
Gelagar memanjang dibagi menjadi gelagar memanjang bagian tepi dan bagian tengah. Masing-masing gelagar memanjang menggunakan profil baja WF (*wide Flange*). Gelagar memanjang bagian tepi dan bagian tengah memakai profil WF 400 x 200 x 8 x 13



Gambar 7.2 Profil Baja WF 300 x 300 x 10 x 15

c. Gelagar melintang

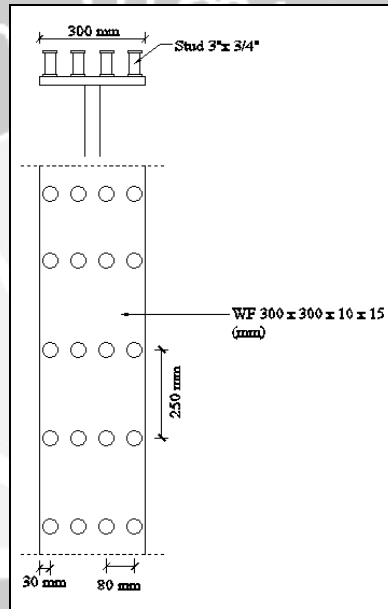
Gelagar melintang menggunakan profil baja WF (*wide Flange*). Profil baja yang digunakan untuk gelagar melintang yaitu WF 800 x 300 x 14 x 26



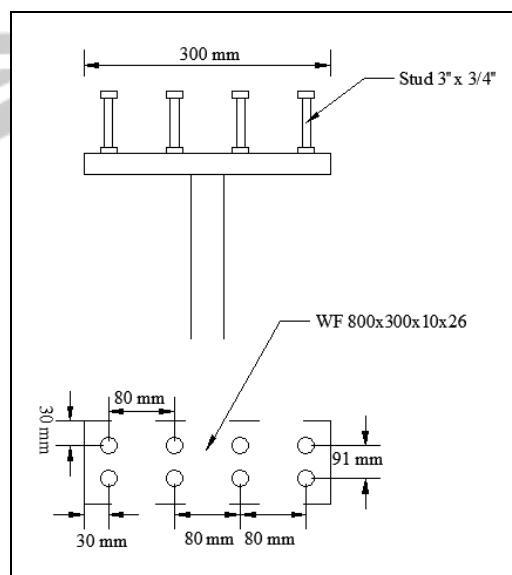
Gambar 7.3 Profil Baja WF 800 x 300 x 14 x 26

- d. Perancangan *shear Connector* menggunakan baja *stud* 3"×3/4" untuk balok memanjang dan balok melintang.

1) Perancangan *shear connector* jembatan



Gambar 7.4. *Shear Connector* dengan Stud pada Gelagar Memanjang

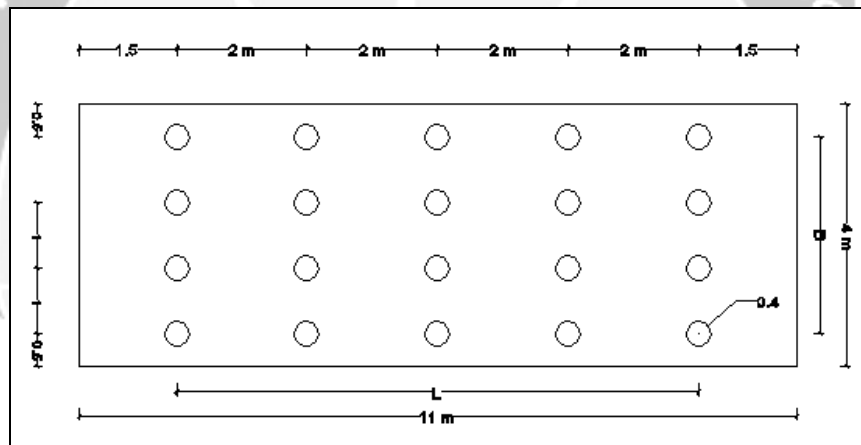


Gambar 7.5. *Shear Connector* dengan Stud pada Gelagar Melintang

- e. Pelat lantai kendaraan menggunakan sistem pelat satu arah dengan ketebalan 250 mm menggunakan tulangan pokok D16 – 250 untuk arah  $X$  dan arah  $Y$ .

## 2. Struktur bawah jembatan

Struktur bawah jembatan terbuat dari beton bertulang dengan kuat tekan beton,  $f'_c = 35$  Mpa dan tegangan leleh baja,  $f_y = 400$  Mpa. Untuk kestabilan abutment digunakan 20 tiang dengan diameter tiang 40 cm, sedangkan perencanaan penempatan tiang dapat dilihat dalam Gambar 7.6.



Gambar 7.6 Perencanaan Letak Fondasi Tiang

## 7.2. Saran

Setelah menganalisa struktur jembatan, penyusun menemukan banyak kesulitan. Penyusun ingin memberikan beberapa saran yang mungkin dapat digunakan dalam merancang struktur jembatan :

1. Dalam melakukan input data pada program *SAP2000 version 11* dengan teliti sesuai dengan asumsi-asumsi yang telah ditetapkan sebelumnya sehingga dapat dilakukan analisis struktur yang mendekati keadaan sebenarnya.

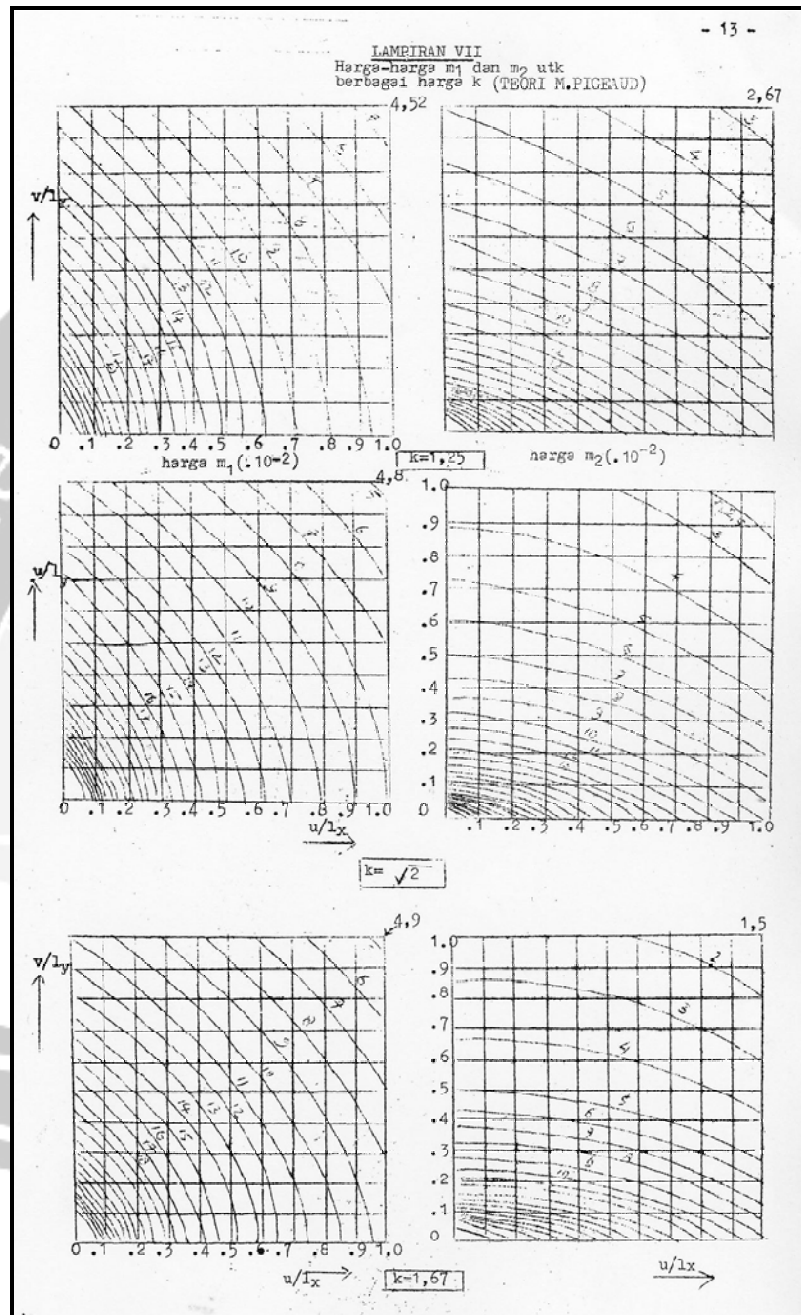
2. Dalam melakukan perencanaan elemen-elemen struktur hendaknya mempertimbangkan kemudahan pelaksanaan pekerjaan dilapangan dan sebaiknya melakukan pengecekan dilapangan.
3. Sebaiknya mempertimbangkan kemudahan mencari data sekunder seperti hasil penyelidikan tanah.



## DAFTAR PUSTAKA

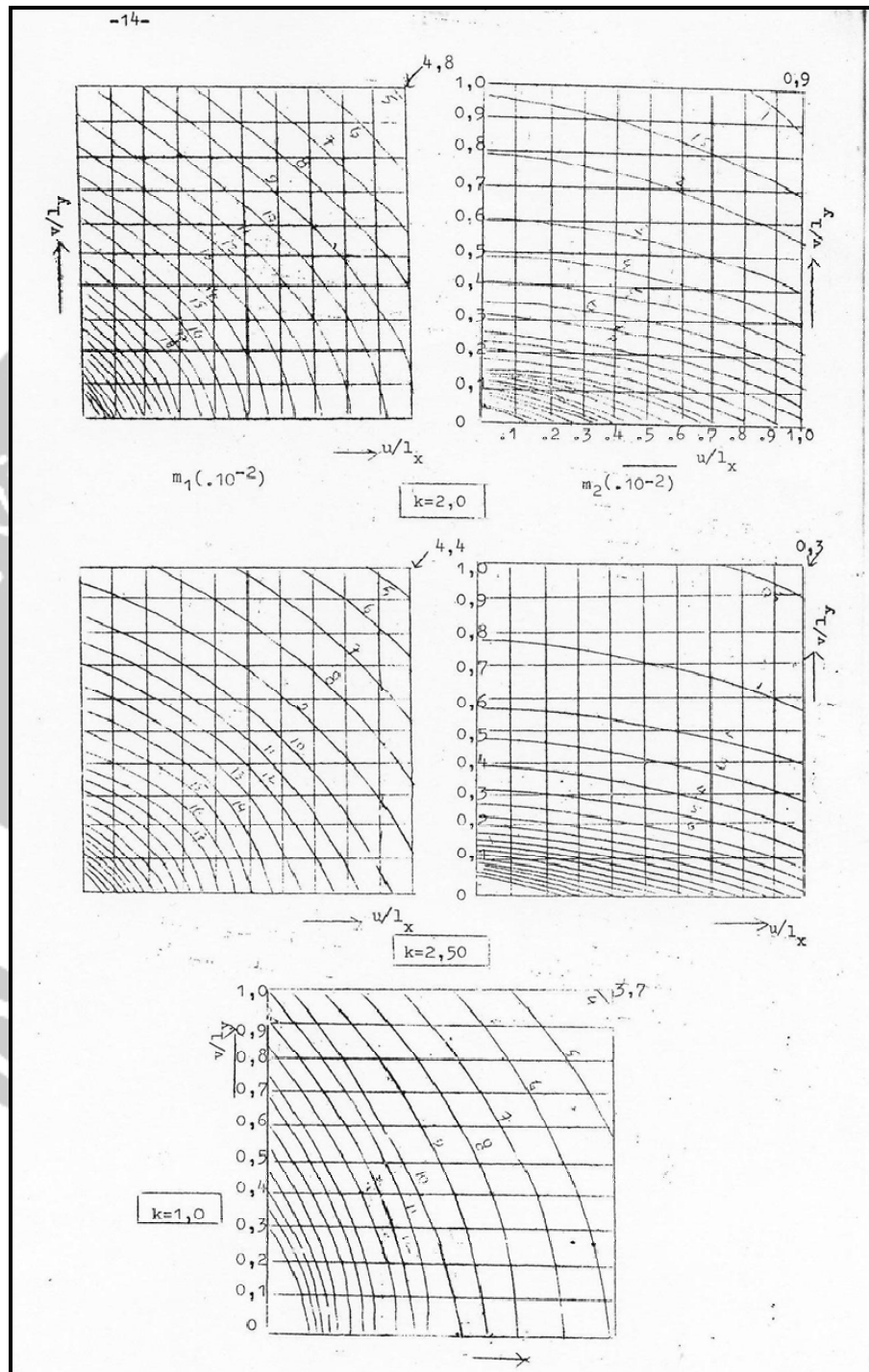
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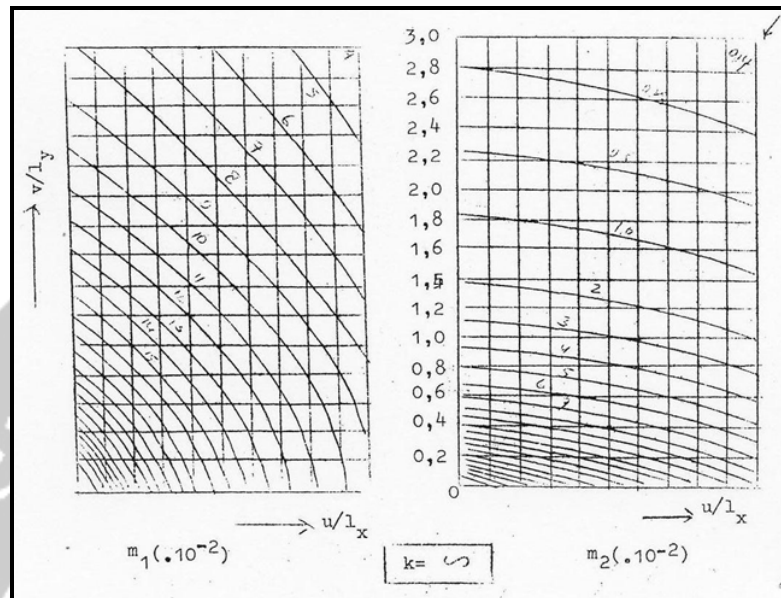


Gambar Grafik M.Pigeaud

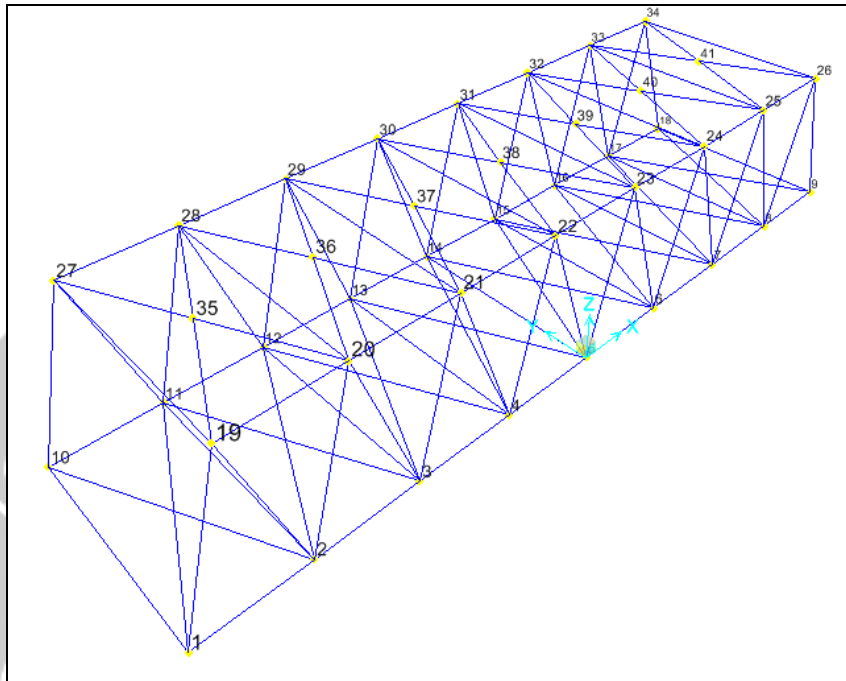




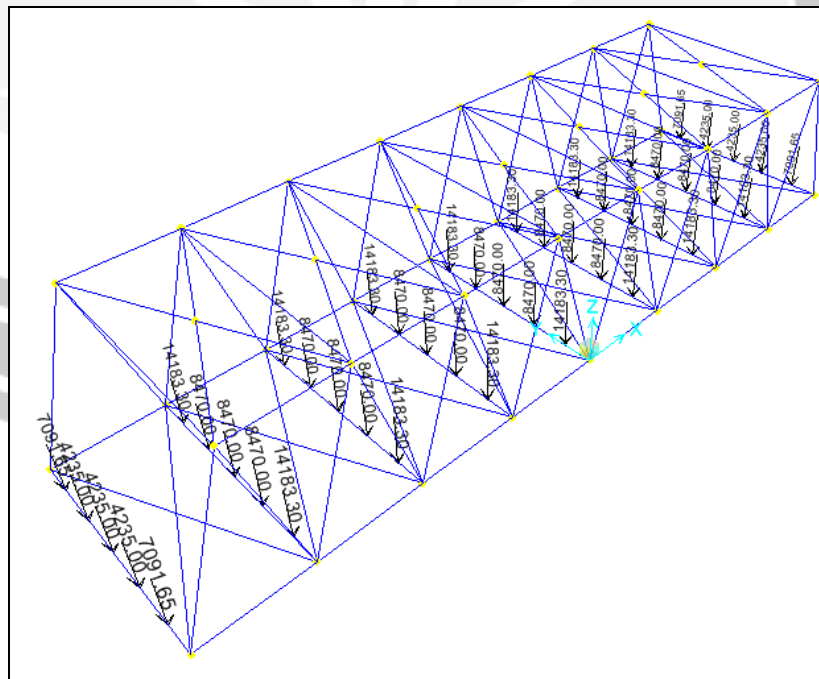
Gambar Grafik M.Pigeaud



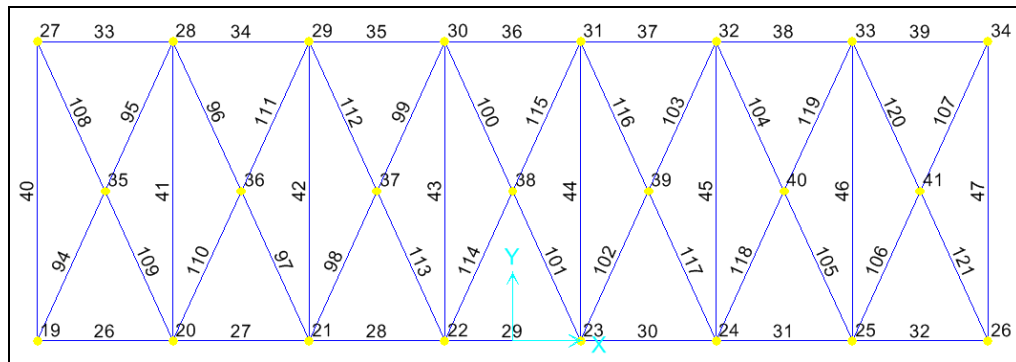
Gambar Grafik M.Pigeaud



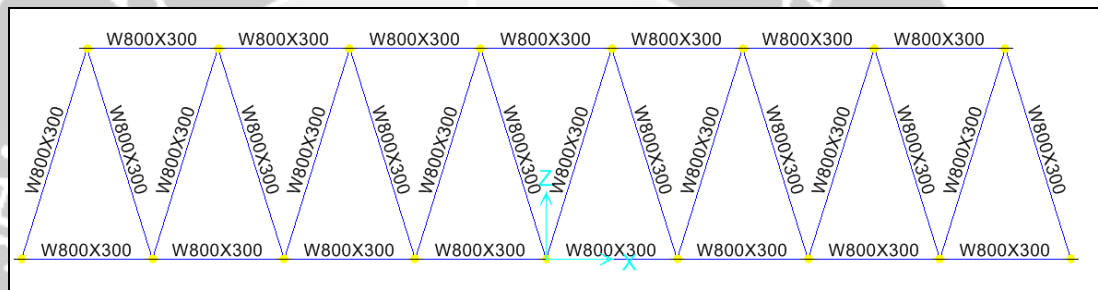
Gambar Penomoran *Joint Label* Struktur Rangka Baja



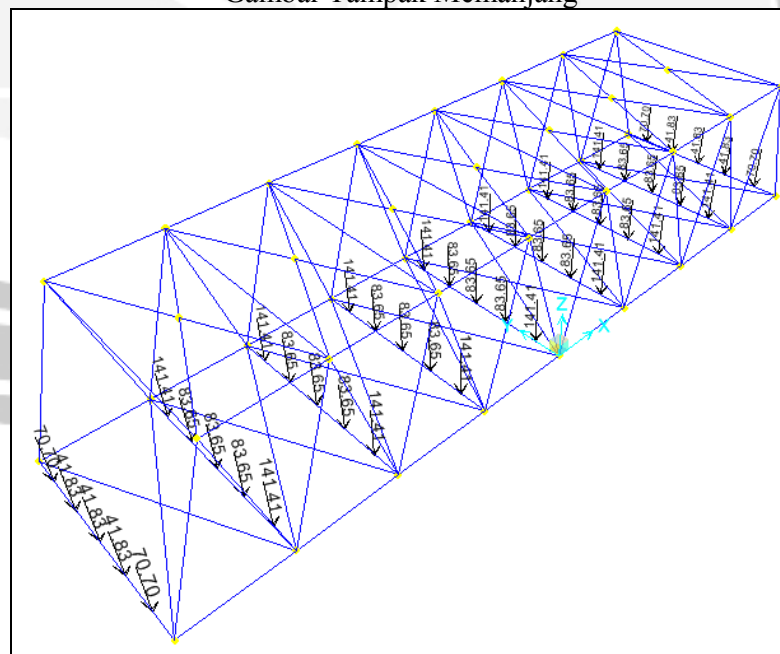
Gambar Beban Mati



Gambar Tampak Atas Penomoran Joint



Gambar Tampak Memanjang



Gambar Beban Hidup

SAP2000 v7.42 File: JOHANNES Kgf-m Units PAGE 1  
 7/20/10 11:26:45  
 Org gila

LOAD COMBO	COMBINATION TYPE	CASE	FACTOR	MULTIPLIERS TYPE	TITLE
COMB1	ADD	DL	1.0000	STATIC (DEAD)	COMB1
		LL	1.0000	STATIC (LIVE)	
		REM	1.0000	STATIC (LIVE)	
		A	1.0000	STATIC (WIND)	
		E	1.0000	STATIC (QUAKE)	

SAP2000 v7.42 File: JOHANNES Kgf-m Units PAGE 2  
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 Org gila

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	-1348.83	2.50	48282.58	-1079.06	2114.19	0.00	-212.73
	0.00	3.75	48282.58	-1079.06	1858.91	0.00	-2695.92
	1348.83	5.00	48282.58	-1079.06	1603.63	0.00	-4860.00
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	-2156.21	1.25	108106.35	-862.49	1891.94	0.00	1992.64
	-1078.11	2.50	108106.35	-862.49	1636.66	0.00	-212.73
	0.00	3.75	108106.35	-862.49	1381.38	0.00	-2099.01
	1078.11	5.00	108106.35	-862.49	1126.10	0.00	-3666.18
	2156.21						
	3	COMB1					
		0.00	147433.95	-699.26	1543.18	0.00	3007.04
	-1748.16	1.25	147433.95	-699.26	1287.91	0.00	1237.60
	-874.08	2.50	147433.95	-699.26	1032.63	0.00	-212.73
	0.00	3.75	147433.95	-699.26	777.35	0.00	-1343.97
	874.08	5.00	147433.95	-699.26	522.08	0.00	-2156.11
	1748.16						
	4	COMB1					
		0.00	166385.94	-555.35	860.24	0.00	1299.68
	-1388.37	1.25	166385.94	-555.35	604.96	0.00	383.93
	-694.19	2.50	166385.94	-555.35	349.69	0.00	-212.73
	0.00	3.75	166385.94	-555.35	94.41	0.00	-490.29
	694.19	5.00	166385.94	-555.35	-160.87	0.00	-448.75
	1388.37						

5	COMB1					
		0.00	164997.94	-422.04	152.10	0.00 -470.68
-1055.09		1.25	164997.94	-422.04	-103.18	0.00 -501.25
-527.55		2.50	164997.94	-422.04	-358.46	0.00 -212.73
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527.55		5.00	164997.94	-422.04	-869.01	0.00 1321.60
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		0.00	143219.33	-295.29	-527.51	0.00 -2169.71
-738.23		1.25	143219.33	-295.29	-782.79	0.00 -1350.77
-369.12		2.50	143219.33	-295.29	-1038.07	0.00 -212.73
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369.12		5.00	143219.33	-295.29	-1548.62	0.00 3020.63
738.23						
7	COMB1					
		0.00	100902.49	-172.15	-1124.60	0.00 -3662.43
-430.36		1.25	100902.49	-172.15	-1379.88	0.00 -2097.13
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215.18		5.00	100902.49	-172.15	-2145.71	0.00 4513.35
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8	COMB1					
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-135.85		2.50	37845.40	-108.68	-2101.48	0.00 -212.73
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135.85		5.00	37845.40	-108.68	-2612.04	0.00 5679.16
271.70						
9	COMB1					
		0.00	40847.09	-737.88	2613.47	0.00 5682.75
-1844.69		1.25	40847.09	-737.88	2358.19	0.00 2575.46
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922.35		5.00	40847.09	-737.88	1592.36	0.00 -4831.83
1844.69						
10	COMB1					
		0.00	103462.62	-644.56	2143.20	0.00 4507.07
-1611.40		1.25	103462.62	-644.56	1887.92	0.00 1987.62
-805.70		2.50	103462.62	-644.56	1632.64	0.00 -212.73
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805.70		5.00	103462.62	-644.56	1122.09	0.00 -3656.15
1611.40						

11	COMB1						
		0.00	144742.88	-570.33	1543.15	0.00	3006.94
-1425.82		1.25	144742.88	-570.33	1287.87	0.00	1237.56
-712.91		2.50	144742.88	-570.33	1032.59	0.00	-212.73
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712.91		5.00	144742.88	-570.33	522.04	0.00	-2156.01
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		0.00	165031.54	-515.27	862.27	0.00	1304.76
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13	COMB1						
		0.00	164509.60	-470.59	155.11	0.00	-463.15
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588.24		5.00	164509.60	-470.59	-866.00	0.00	1314.07
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14	COMB1						
		0.00	143222.62	-432.60	-524.12	0.00	-2161.21
-1081.50		1.25	143222.62	-432.60	-779.39	0.00	-1346.52
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540.75		5.00	143222.62	-432.60	-1545.22	0.00	3012.14
1081.50							
15	COMB1						
		0.00	101087.95	-402.52	-1121.12	0.00	-3653.74
-1006.30		1.25	101087.95	-402.52	-1376.40	0.00	-2092.78
-503.15		2.50	101087.95	-402.52	-1631.68	0.00	-212.73
0.00		3.75	101087.95	-402.52	-1886.96	0.00	1986.42
503.15		5.00	101087.95	-402.52	-2142.23	0.00	4504.66
1006.30							
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		0.00	37949.41	-326.59	-1587.52	0.00	-4819.73
-816.47		1.25	37949.41	-326.59	-1842.80	0.00	-2675.78
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0.00		3.75	37949.41	-326.59	-2353.35	0.00	2569.41
408.23		5.00	37949.41	-326.59	-2608.63	0.00	5670.65
816.47							

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		0.00	0.00	-14700.81	355.15	0.00	613.37
-27424.43		2.75	0.00	-6976.85	126.46	0.00	-77.43
3277.64		5.50	0.00	-2138.41	42.15	0.00	-256.59
13138.11		8.25	0.00	6976.85	-126.46	0.00	-77.43
3277.64		11.00	0.00	14700.81	-355.15	0.00	613.37
-27424.43							
18	COMB1						
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-52656.34		2.75	-3919.93	-13367.85	251.43	0.00	-159.00
6364.52		5.50	-3919.93	-4252.59	82.81	0.00	-513.19
25246.59		8.25	-3919.93	13416.32	-254.43	0.00	-150.74
6231.23		11.00	-3919.93	28302.64	-711.80	0.00	1235.01
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25246.59		8.25	-8365.52	13420.67	-256.19	0.00	-145.91
6219.27		11.00	-8365.52	28306.99	-713.56	0.00	1244.67
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25246.59		8.25	-7807.72	13414.19	-256.29	0.00	-145.64
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-52911.21							



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		2.75	-6230.21	-13377.29	249.57	-164.10
6338.57						
		5.50	-6230.21	-4262.03	80.95	-513.19
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		8.25	-6230.21	13406.88	-256.29	-145.64
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3277.64						
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13138.11						
		8.25	-1079.89	6976.85	-129.76	-68.36
3277.64						
		11.00	-1079.89	14700.81	-358.45	631.51
-27424.43						
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-183.26						
		2.50	-73283.80	-146.61	1891.84	-212.73
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183.26						
		5.00	-73283.80	-146.61	1381.28	-4304.14
366.52						
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		2.50	-125103.77	-254.32	1347.52	-212.73
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		3.75	-125103.77	-254.32	1092.24	-1737.58
317.90						
		5.00	-125103.77	-254.32	836.97	-2943.34
635.80						
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		1.25	-156185.65	-336.50	952.64	818.52
-420.63						
		2.50	-156185.65	-336.50	697.36	-212.73
0.00						
		3.75	-156185.65	-336.50	442.09	-924.89
420.63						
		5.00	-156185.65	-336.50	186.81	-1317.94
841.25						

29	COMB1	0.00	-166604.10	-384.84	505.71	0.00	413.36
-962.10		1.25	-166604.10	-384.84	250.43	0.00	-59.24
-481.05		2.50	-166604.10	-384.84	-4.84	0.00	-212.73
0.00		3.75	-166604.10	-384.84	-260.12	0.00	-47.13
481.05		5.00	-166604.10	-384.84	-515.40	0.00	437.57
962.10							
30	COMB1	0.00	-156369.38	-412.97	-194.84	0.00	-1338.04
-1032.41		1.25	-156369.38	-412.97	-450.12	0.00	-934.93
-516.21		2.50	-156369.38	-412.97	-705.40	0.00	-212.73
0.00		3.75	-156369.38	-412.97	-960.68	0.00	828.57
516.21		5.00	-156369.38	-412.97	-1215.95	0.00	2188.96
1032.41							
31	COMB1	0.00	-125392.04	-430.32	-839.92	0.00	-2950.73
-1075.80		1.25	-125392.04	-430.32	-1095.20	0.00	-1741.28
-537.90		2.50	-125392.04	-430.32	-1350.48	0.00	-212.73
0.00		3.75	-125392.04	-430.32	-1605.75	0.00	1634.91
537.90		5.00	-125392.04	-430.32	-1861.03	0.00	3801.65
1075.80							
32	COMB1	0.00	-73499.07	-416.58	-1375.29	0.00	-4289.15
-1041.44		1.25	-73499.07	-416.58	-1630.57	0.00	-2410.49
-520.72		2.50	-73499.07	-416.58	-1885.84	0.00	-212.73
0.00		3.75	-73499.07	-416.58	-2141.12	0.00	2304.12
520.72		5.00	-73499.07	-416.58	-2396.40	0.00	5140.07
1041.44							
33	COMB1	0.00	-73504.79	-557.72	2395.71	0.00	5138.36
-1394.30		1.25	-73504.79	-557.72	2140.44	0.00	2303.27
-697.15		2.50	-73504.79	-557.72	1885.16	0.00	-212.73
0.00		3.75	-73504.79	-557.72	1629.88	0.00	-2409.63
697.15		5.00	-73504.79	-557.72	1374.60	0.00	-4287.43
1394.30							
34	COMB1	0.00	-125283.64	-560.77	1856.70	0.00	3790.82
-1401.92		1.25	-125283.64	-560.77	1601.42	0.00	1629.49
-700.96		2.50	-125283.64	-560.77	1346.14	0.00	-212.73
0.00		3.75	-125283.64	-560.77	1090.86	0.00	-1735.86
700.96		5.00	-125283.64	-560.77	835.59	0.00	-2939.89
1401.92							

35	COMB1					
-1220.09	0.00	-156171.82	-488.04	1209.35	0.00	2172.46
-610.05	1.25	-156171.82	-488.04	954.08	0.00	820.32
0.00	2.50	-156171.82	-488.04	698.80	0.00	-212.73
610.05	3.75	-156171.82	-488.04	443.52	0.00	-926.68
1220.09	5.00	-156171.82	-488.04	188.24	0.00	-1321.54
36	COMB1					
-962.50	0.00	-166381.85	-385.00	508.52	0.00	420.37
-481.25	1.25	-166381.85	-385.00	253.24	0.00	-55.73
0.00	2.50	-166381.85	-385.00	-2.04	0.00	-212.73
481.25	3.75	-166381.85	-385.00	-257.31	0.00	-50.64
962.50	5.00	-166381.85	-385.00	-512.59	0.00	430.55
37	COMB1					
-654.30	0.00	-156012.05	-261.72	-191.48	0.00	-1329.62
-327.15	1.25	-156012.05	-261.72	-446.76	0.00	-930.73
0.00	2.50	-156012.05	-261.72	-702.03	0.00	-212.73
327.15	3.75	-156012.05	-261.72	-957.31	0.00	824.36
654.30	5.00	-156012.05	-261.72	-1212.59	0.00	2180.55
38	COMB1					
-310.73	0.00	-125033.20	-124.29	-836.43	0.00	-2941.99
-155.36	1.25	-125033.20	-124.29	-1091.70	0.00	-1736.91
0.00	2.50	-125033.20	-124.29	-1346.98	0.00	-212.73
155.36	3.75	-125033.20	-124.29	-1602.26	0.00	1630.54
310.73	5.00	-125033.20	-124.29	-1857.54	0.00	3792.92
39	COMB1					
-8.58	0.00	-73318.74	-3.43	-1371.89	0.00	-4280.64
-4.29	1.25	-73318.74	-3.43	-1627.16	0.00	-2406.23
0.00	2.50	-73318.74	-3.43	-1882.44	0.00	-212.73
4.29	3.75	-73318.74	-3.43	-2137.72	0.00	2299.87
8.58	5.00	-73318.74	-3.43	-2393.00	0.00	5131.57
40	COMB1					
-917.01	0.00	1548.81	-502.76	-1.78	0.00	-9.81
119.06	2.75	1548.81	-250.74	-1.78	0.00	-4.91
462.05	5.50	1548.81	1.29	-1.78	0.00	0.00
111.97	8.25	1548.81	253.32	-1.78	0.00	4.91
-931.19	11.00	1548.81	505.34	-1.78	0.00	9.81

41	COMB1						
-911.17	0.00	3668.41	-501.70	-1.81	0.00	-9.95	
121.98	2.75	3668.41	-249.68	-1.81	0.00	-4.98	
462.05	5.50	3668.41	2.35	-1.81	0.00	0.00	
109.05	8.25	3668.41	254.38	-1.81	0.00	4.98	
-937.03	11.00	3668.41	506.40	-1.81	0.00	9.95	
42	COMB1						
-909.96	0.00	5248.39	-501.48	-1.83	0.00	-10.07	
122.58	2.75	5248.39	-249.46	-1.83	0.00	-5.03	
462.05	5.50	5248.39	2.57	-1.83	0.00	0.00	
108.45	8.25	5248.39	254.60	-1.83	0.00	5.03	
-938.23	11.00	5248.39	506.62	-1.83	0.00	10.07	
43	COMB1						
-911.22	0.00	6029.68	-501.71	-1.83	0.00	-10.06	
121.95	2.75	6029.68	-249.69	-1.83	0.00	-5.03	
462.05	5.50	6029.68	2.34	-1.83	0.00	0.00	
109.07	8.25	6029.68	254.37	-1.83	0.00	5.03	
-936.98	11.00	6029.68	506.40	-1.83	0.00	10.06	
44	COMB1						
-913.67	0.00	6030.51	-502.16	-1.80	0.00	-9.92	
120.73	2.75	6030.51	-250.13	-1.80	0.00	-4.96	
462.05	5.50	6030.51	1.90	-1.80	0.00	0.00	
110.30	8.25	6030.51	253.92	-1.80	0.00	4.96	
-934.53	11.00	6030.51	505.95	-1.80	0.00	9.92	
45	COMB1						
-916.61	0.00	5250.72	-502.69	-1.76	0.00	-9.69	
119.26	2.75	5250.72	-250.67	-1.76	0.00	-4.84	
462.05	5.50	5250.72	1.36	-1.76	0.00	0.00	
111.77	8.25	5250.72	253.39	-1.76	0.00	4.84	
-931.59	11.00	5250.72	505.41	-1.76	0.00	9.69	
46	COMB1						
-919.66	0.00	3672.90	-503.25	-1.72	0.00	-9.46	
117.73	2.75	3672.90	-251.22	-1.72	0.00	-4.73	
462.05	5.50	3672.90	8.063E-01	-1.72	0.00	0.00	
113.29	8.25	3672.90	252.83	-1.72	0.00	4.73	
-928.53	11.00	3672.90	504.86	-1.72	0.00	9.46	

47	COMB1	0.00	1542.81	-503.79	-1.70	0.00	-9.34
-922.64		2.75	1542.81	-251.76	-1.70	0.00	-4.67
116.24		5.50	1542.81	2.657E-01	-1.70	0.00	0.00
462.05		8.25	1542.81	252.29	-1.70	0.00	4.67
114.78		11.00	1542.81	504.32	-1.70	0.00	9.34
-925.56							
48	COMB1	0.00	-128817.89	-375.23	718.45	0.00	2297.63
-1572.50		4.19	-128001.01	-375.23	463.17	0.00	-178.30
0.00		8.38	-127184.12	-375.23	207.89	0.00	-1584.43
1572.50							
49	COMB1	0.00	123594.95	104.37	694.12	0.00	2195.71
437.40		4.19	122778.06	104.37	438.85	0.00	-178.30
0.00		8.38	121961.17	104.37	183.57	0.00	-1482.50
-437.40							
50	COMB1	0.00	-91099.50	-141.17	651.34	0.00	2016.40
-591.63		4.19	-90282.61	-141.17	396.06	0.00	-178.30
0.00		8.38	-89465.72	-141.17	140.78	0.00	-1303.20
591.63							
51	COMB1	0.00	87757.33	-75.32	598.88	0.00	1796.55
-315.65		4.19	86940.44	-75.32	343.60	0.00	-178.30
0.00		8.38	86123.55	-75.32	88.32	0.00	-1083.34
315.65							
52	COMB1	0.00	-55418.95	11.48	531.36	0.00	1513.62
48.12		4.19	-54602.06	11.48	276.09	0.00	-178.30
0.00		8.38	-53785.17	11.48	20.81	0.00	-800.41
-48.12							
53	COMB1	0.00	52200.02	-187.01	460.14	0.00	1215.13
-783.70		4.19	51383.13	-187.01	204.86	0.00	-178.30
0.00		8.38	50566.24	-187.01	-50.42	0.00	-501.92
783.70							
54	COMB1	0.00	-19953.60	102.54	377.79	0.00	870.04
429.72		4.19	-19136.71	102.54	122.52	0.00	-178.30
0.00		8.38	-18319.83	102.54	-132.76	0.00	-156.84
-429.72							


55	COMB1					
		0.00	16794.63	-241.94	297.53	533.66
-1013.91		4.19	15977.74	-241.94	42.25	-178.30
0.00		8.38	15160.86	-241.94	-213.03	179.55
1013.91						
56	COMB1					
		0.00	15427.17	145.34	210.21	167.73
609.08		4.19	16244.06	145.34	-45.07	-178.30
0.00		8.38	17060.95	145.34	-300.35	545.47
-609.08						
57	COMB1					
		0.00	-18588.93	-251.28	130.60	-165.88
-1053.04		4.19	-19405.82	-251.28	-124.67	-178.30
0.00		8.38	-20222.71	-251.28	-379.95	879.08
1053.04						
58	COMB1					
		0.00	50850.90	147.62	48.17	-511.35
618.63		4.19	51667.78	147.62	-207.11	-178.30
0.00		8.38	52484.67	147.62	-462.39	1224.55
-618.63						
59	COMB1					
		0.00	-54078.12	-221.74	-21.05	-801.41
-929.26		4.19	-54895.01	-221.74	-276.32	-178.30
0.00		8.38	-55711.90	-221.74	-531.60	1514.61
929.26						
60	COMB1					
		0.00	86443.90	113.72	-88.70	-1084.94
476.59		4.19	87260.79	113.72	-343.98	-178.30
0.00		8.38	88077.68	113.72	-599.26	1798.15
-476.59						
61	COMB1					
		0.00	-89799.61	-156.93	-137.73	-1290.38
-657.68		4.19	-90616.50	-156.93	-393.00	-178.30
0.00		8.38	-91433.38	-156.93	-648.28	2003.58
657.68						
62	COMB1					
		0.00	122325.80	52.37	-180.62	-1470.15
219.47		4.19	123142.70	52.37	-435.90	-178.30
0.00		8.38	123959.59	52.37	-691.18	2183.35
-219.47						
63	COMB1					
		0.00	-127545.23	-79.65	-199.95	-1551.17
-333.79		4.19	-128362.12	-79.65	-455.23	-178.30
0.00		8.38	-129179.01	-79.65	-710.51	2264.37
333.79						

64	COMB1					
-1888.50	0.00	-129376.39	-450.63	711.26	0.00	2267.52
0.00	4.19	-128559.51	-450.63	455.98	0.00	-178.30
1888.50	8.38	-127742.62	-450.63	200.71	0.00	-1554.31
65	COMB1					
1112.31	0.00	124155.70	265.42	690.49	0.00	2180.49
0.00	4.19	123338.81	265.42	435.22	0.00	-178.30
-1112.31	8.38	122521.92	265.42	179.94	0.00	-1467.28
66	COMB1					
-1698.99	0.00	-91599.34	-405.41	647.59	0.00	2000.68
0.00	4.19	-90782.45	-405.41	392.31	0.00	-178.30
1698.99	8.38	-89965.57	-405.41	137.03	0.00	-1287.47
67	COMB1					
1020.96	0.00	88242.62	243.62	597.34	0.00	1790.11
0.00	4.19	87425.73	243.62	342.06	0.00	-178.30
-1020.96	8.38	86608.84	243.62	86.79	0.00	-1076.90
68	COMB1					
-1610.84	0.00	-55827.75	-384.38	529.72	0.00	1506.74
0.00	4.19	-55010.87	-384.38	274.45	0.00	-178.30
1610.84	8.38	-54193.98	-384.38	19.17	0.00	-793.54
69	COMB1					
1010.90	0.00	52596.40	241.22	459.78	0.00	1213.63
0.00	4.19	51779.51	241.22	204.50	0.00	-178.30
-1010.90	8.38	50962.62	241.22	-50.77	0.00	-500.42
70	COMB1					
-1524.28	0.00	-20275.27	-363.72	377.43	0.00	868.50
0.00	4.19	-19458.38	-363.72	122.15	0.00	-178.30
1524.28	8.38	-18641.49	-363.72	-133.13	0.00	-155.29
71	COMB1					
982.26	0.00	17106.39	234.39	297.80	0.00	534.81
0.00	4.19	16289.50	234.39	42.52	0.00	-178.30
-982.26	8.38	15472.62	234.39	-212.75	0.00	178.39
72	COMB1					
-1387.25	0.00	15179.39	-331.03	210.58	0.00	169.27
0.00	4.19	15996.28	-331.03	-44.70	0.00	-178.30
1387.25	8.38	16813.17	-331.03	-299.98	0.00	543.94

73	COMB1	0.00	-18348.51	212.90	131.20	0.00	-163.37
892.23		4.19	-19165.39	212.90	-124.08	0.00	-178.30
0.00		8.38	-19982.28	212.90	-379.35	0.00	876.58
-892.23							
74	COMB1	0.00	50659.59	-278.60	48.92	0.00	-508.17
-1167.54		4.19	51476.47	-278.60	-206.35	0.00	-178.30
0.00		8.38	52293.36	-278.60	-461.63	0.00	1221.38
1167.54							
75	COMB1	0.00	-53891.76	170.01	-20.29	0.00	-798.24
712.47		4.19	-54708.64	170.01	-275.57	0.00	-178.30
0.00		8.38	-55525.53	170.01	-530.85	0.00	1511.45
-712.47							
76	COMB1	0.00	86290.24	-201.21	-87.79	0.00	-1081.09
-843.22		4.19	87107.13	-201.21	-343.06	0.00	-178.30
0.00		8.38	87924.02	-201.21	-598.34	0.00	1794.30
843.22							
77	COMB1	0.00	-89648.68	100.17	-136.90	0.00	-1286.91
419.79		4.19	-90465.57	100.17	-392.17	0.00	-178.30
0.00		8.38	-91282.45	100.17	-647.45	0.00	2000.11
-419.79							
78	COMB1	0.00	122190.94	-101.03	-179.71	0.00	-1466.33
-423.41		4.19	123007.83	-101.03	-434.99	0.00	-178.30
0.00		8.38	123824.72	-101.03	-690.27	0.00	2179.53
423.41							
79	COMB1	0.00	-127407.54	19.06	-199.09	0.00	-1547.55
79.86		4.19	-128224.42	19.06	-454.37	0.00	-178.30
0.00		8.38	-129041.31	19.06	-709.65	0.00	2260.76
-79.86							
94	COMB1	0.00	-1562.17	-375.61	-8.96	0.00	-27.08
-859.44		1.51	-1562.17	-307.29	-8.96	0.00	-13.54
-343.73		3.02	-1562.17	-238.96	-8.96	0.00	0.00
68.80		4.53	-1562.17	-170.64	-8.96	0.00	13.54
378.12		6.04	-1562.17	-102.32	-8.96	0.00	27.08
584.26							



95	COMB1	0.00	-1555.81	-101.95	-11.89	0.00	-35.92
-32.79		1.51	-1555.81	-33.63	-11.89	0.00	-17.96
69.60		3.02	-1555.81	34.69	-11.89	0.00	0.00
68.80		4.53	-1555.81	103.02	-11.89	0.00	17.96
-35.20		6.04	-1555.81	171.34	-11.89	0.00	35.92
-242.39							
96	COMB1	0.00	-3193.81	-347.38	11.06	0.00	33.42
-774.17		1.51	-3193.81	-279.06	11.06	0.00	16.71
-301.09		3.02	-3193.81	-210.74	11.06	0.00	0.00
68.80		4.53	-3193.81	-142.41	11.06	0.00	-16.71
335.49		6.04	-3193.81	-74.09	11.06	0.00	-33.42
498.99							
97	COMB1	0.00	-3189.05	-74.17	13.20	0.00	39.88
51.15		1.51	-3189.05	-5.84	13.20	0.00	19.94
111.57		3.02	-3189.05	62.48	13.20	0.00	0.00
68.80		4.53	-3189.05	130.80	13.20	0.00	-19.94
-77.17		6.04	-3189.05	199.13	13.20	0.00	-39.88
-326.33							
98	COMB1	0.00	-3344.37	-310.40	-19.46	0.00	-58.78
-662.45		1.51	-3344.37	-242.07	-19.46	0.00	-29.39
-245.23		3.02	-3344.37	-173.75	-19.46	0.00	0.00
68.80		4.53	-3344.37	-105.43	-19.46	0.00	29.39
279.63		6.04	-3344.37	-37.10	-19.46	0.00	58.78
387.27							
99	COMB1	0.00	-3342.02	-37.18	-20.52	0.00	-62.00
162.86		1.51	-3342.02	31.14	-20.52	0.00	-31.00
167.43		3.02	-3342.02	99.46	-20.52	0.00	0.00
68.80		4.53	-3342.02	167.79	-20.52	0.00	31.00
-133.03		6.04	-3342.02	236.11	-20.52	0.00	62.00
-438.05							
100	COMB1	0.00	-4068.52	-273.91	16.88	0.00	51.00
-552.22		1.51	-4068.52	-205.58	16.88	0.00	25.50
-190.12		3.02	-4068.52	-137.26	16.88	0.00	0.00
68.80		4.53	-4068.52	-68.94	16.88	0.00	-25.50
224.52		6.04	-4068.52	-6.150E-01	16.88	0.00	-51.00
277.04							



101	COMB1	0.00	-4068.53	-4.623E-01	16.91	0.00	51.09
273.79		1.51	-4068.53	67.86	16.91	0.00	25.54
222.89		3.02	-4068.53	136.18	16.91	0.00	0.00
68.80		4.53	-4068.53	204.51	16.91	0.00	-25.54
-188.49		6.04	-4068.53	272.83	16.91	0.00	-51.09
-548.97							
102	COMB1	0.00	-3484.40	-234.35	-20.41	0.00	-61.67
-432.74		1.51	-3484.40	-166.03	-20.41	0.00	-30.83
-130.37		3.02	-3484.40	-97.71	-20.41	0.00	0.00
68.80		4.53	-3484.40	-29.38	-20.41	0.00	30.83
164.77		6.04	-3484.40	38.94	-20.41	0.00	61.67
157.55							
103	COMB1	0.00	-3486.73	38.76	-19.30	0.00	-58.31
392.26		1.51	-3486.73	107.08	-19.30	0.00	-29.16
282.12		3.02	-3486.73	175.40	-19.30	0.00	0.00
68.80		4.53	-3486.73	243.73	-19.30	0.00	29.16
-247.73		6.04	-3486.73	312.05	-19.30	0.00	58.31
-667.44							
104	COMB1	0.00	-2939.59	-200.37	13.42	0.00	40.54
-330.09		1.51	-2939.59	-132.05	13.42	0.00	20.27
-79.05		3.02	-2939.59	-63.72	13.42	0.00	0.00
68.80		4.53	-2939.59	4.60	13.42	0.00	-20.27
113.45		6.04	-2939.59	72.92	13.42	0.00	-40.54
54.90							
105	COMB1	0.00	-2944.35	73.11	11.31	0.00	34.17
496.04		1.51	-2944.35	141.43	11.31	0.00	17.08
334.01		3.02	-2944.35	209.76	11.31	0.00	0.00
68.80		4.53	-2944.35	278.08	11.31	0.00	-17.08
-299.62		6.04	-2944.35	346.40	11.31	0.00	-34.17
-771.22							
106	COMB1	0.00	-1827.96	-170.49	-11.64	0.00	-35.17
-239.84		1.51	-1827.96	-102.17	-11.64	0.00	-17.59
-33.92		3.02	-1827.96	-33.85	-11.64	0.00	0.00
68.80		4.53	-1827.96	34.47	-11.64	0.00	17.59
68.32		6.04	-1827.96	102.80	-11.64	0.00	35.17
-35.34							

107	COMB1						
		0.00	-1834.35	102.61	-8.71	0.00	-26.31
585.15		1.51	-1834.35	170.94	-8.71	0.00	-13.15
378.57		3.02	-1834.35	239.26	-8.71	0.00	0.00
68.80		4.53	-1834.35	307.58	-8.71	0.00	13.15
-344.17		6.04	-1834.35	375.90	-8.71	0.00	26.31
-860.33							
108	COMB1						
		0.00	-1877.45	-376.49	4.88	0.00	14.73
-862.11		1.51	-1877.45	-308.17	4.88	0.00	7.37
-345.06		3.02	-1877.45	-239.85	4.88	0.00	0.00
68.80		4.53	-1877.45	-171.52	4.88	0.00	-7.37
379.46		6.04	-1877.45	-103.20	4.88	0.00	-14.73
586.93							
109	COMB1						
		0.00	-1871.06	-103.56	7.75	0.00	23.40
-37.66		1.51	-1871.06	-35.24	7.75	0.00	11.70
67.17		3.02	-1871.06	33.08	7.75	0.00	0.00
68.80		4.53	-1871.06	101.41	7.75	0.00	-11.70
-32.77		6.04	-1871.06	169.73	7.75	0.00	-23.40
-237.52							
110	COMB1						
		0.00	-2660.14	-345.77	-15.33	0.00	-46.32
-769.31		1.51	-2660.14	-277.45	-15.33	0.00	-23.16
-298.66		3.02	-2660.14	-209.13	-15.33	0.00	0.00
68.80		4.53	-2660.14	-140.80	-15.33	0.00	23.16
333.06		6.04	-2660.14	-72.48	-15.33	0.00	46.32
494.13							
111	COMB1						
		0.00	-2655.40	-72.40	-17.52	0.00	-52.91
56.47		1.51	-2655.40	-4.08	-17.52	0.00	-26.46
114.23		3.02	-2655.40	64.24	-17.52	0.00	0.00
68.80		4.53	-2655.40	132.56	-17.52	0.00	26.46
-79.83		6.04	-2655.40	200.89	-17.52	0.00	52.91
-331.65							
112	COMB1						
		0.00	-3891.67	-312.16	15.14	0.00	45.72
-667.77		1.51	-3891.67	-243.83	15.14	0.00	22.86
-247.89		3.02	-3891.67	-175.51	15.14	0.00	0.00
68.80		4.53	-3891.67	-107.19	15.14	0.00	-22.86
282.29		6.04	-3891.67	-38.86	15.14	0.00	-45.72
392.58							

113	COMB1	0.00	-3889.32	-38.79	16.21	0.00	48.95
158.02		1.51	-3889.32	29.54	16.21	0.00	24.48
165.00		3.02	-3889.32	97.86	16.21	0.00	0.00
68.80		4.53	-3889.32	166.18	16.21	0.00	-24.48
-130.61		6.04	-3889.32	234.51	16.21	0.00	-48.95
-433.20							
114	COMB1	0.00	-3627.64	-272.30	-21.14	0.00	-63.86
-547.38		1.51	-3627.64	-203.98	-21.14	0.00	-31.93
-187.69		3.02	-3627.64	-135.66	-21.14	0.00	0.00
68.80		4.53	-3627.64	-67.33	-21.14	0.00	31.93
222.09		6.04	-3627.64	9.893E-01	-21.14	0.00	63.86
272.19							
115	COMB1	0.00	-3627.62	8.366E-01	-21.11	0.00	-63.78
277.71		1.51	-3627.62	69.16	-21.11	0.00	-31.89
224.85		3.02	-3627.62	137.48	-21.11	0.00	0.00
68.80		4.53	-3627.62	205.81	-21.11	0.00	31.89
-190.45		6.04	-3627.62	274.13	-21.11	0.00	63.78
-552.89							
116	COMB1	0.00	-3746.56	-235.65	16.32	0.00	49.29
-436.66		1.51	-3746.56	-167.33	16.32	0.00	24.64
-132.34		3.02	-3746.56	-99.00	16.32	0.00	0.00
68.80		4.53	-3746.56	-30.68	16.32	0.00	-24.64
166.73		6.04	-3746.56	37.64	16.32	0.00	-49.29
161.48							
117	COMB1	0.00	-3748.93	37.82	15.30	0.00	46.21
389.44		1.51	-3748.93	106.15	15.30	0.00	23.10
280.72		3.02	-3748.93	174.47	15.30	0.00	0.00
68.80		4.53	-3748.93	242.79	15.30	0.00	-23.10
-246.32		6.04	-3748.93	311.12	15.30	0.00	-46.21
-664.63							
118	COMB1	0.00	-2903.51	-199.44	-17.30	0.00	-52.25
-327.27		1.51	-2903.51	-131.11	-17.30	0.00	-26.13
-77.64		3.02	-2903.51	-62.79	-17.30	0.00	0.00
68.80		4.53	-2903.51	5.53	-17.30	0.00	26.13
112.04		6.04	-2903.51	73.85	-17.30	0.00	52.25
52.09							

119	COMB1	0.00	-2908.23	73.66	-15.10	0.00	-45.60
497.71		1.51	-2908.23	141.99	-15.10	0.00	-22.80
334.85		3.02	-2908.23	210.31	-15.10	0.00	0.00
68.80		4.53	-2908.23	278.63	-15.10	0.00	22.80
-300.45		6.04	-2908.23	346.96	-15.10	0.00	45.60
-772.89							
120	COMB1	0.00	-1600.61	-171.05	8.01	0.00	24.20
-241.51		1.51	-1600.61	-102.72	8.01	0.00	12.10
-34.76		3.02	-1600.61	-34.40	8.01	0.00	0.00
68.80		4.53	-1600.61	33.92	8.01	0.00	-12.10
69.16		6.04	-1600.61	102.25	8.01	0.00	-24.20
-33.68							
121	COMB1	0.00	-1607.03	102.43	5.12	0.00	15.47
584.60		1.51	-1607.03	170.75	5.12	0.00	7.74
378.30		3.02	-1607.03	239.08	5.12	0.00	0.00
68.80		4.53	-1607.03	307.40	5.12	0.00	-7.74
-343.90		6.04	-1607.03	375.72	5.12	0.00	-15.47
-859.78							
124	COMB1	0.00	3108.37	-388.02	2.69	0.00	8.13
-896.94		1.51	3108.37	-319.70	2.69	0.00	4.07
-362.48		3.02	3108.37	-251.38	2.69	0.00	0.00
68.80		4.53	3108.37	-183.06	2.69	0.00	-4.07
396.88		6.04	3108.37	-114.73	2.69	0.00	-8.13
621.76							
125	COMB1	0.00	3102.65	-114.12	4.15	0.00	12.53
-69.54		1.51	3102.65	-45.80	4.15	0.00	6.27
51.22		3.02	3102.65	22.53	4.15	0.00	0.00
68.80		4.53	3102.65	90.85	4.15	0.00	-6.27
-16.83		6.04	3102.65	159.17	4.15	0.00	-12.53
-205.64							
126	COMB1	0.00	1845.22	-362.85	-12.61	0.00	-38.08
-820.90		1.51	1845.22	-294.53	-12.61	0.00	-19.04
-324.46		3.02	1845.22	-226.21	-12.61	0.00	0.00
68.80		4.53	1845.22	-157.88	-12.61	0.00	19.04
358.85		6.04	1845.22	-89.56	-12.61	0.00	38.08
545.72							

127	COMB1						
		0.00	1842.11	-89.78	-14.73	0.00	-44.51
3.99							
		1.51	1842.11	-21.45	-14.73	0.00	-22.25
87.99							
		3.02	1842.11	46.87	-14.73	0.00	0.00
68.80							
		4.53	1842.11	115.19	-14.73	0.00	22.25
-53.59							
		6.04	1842.11	183.51	-14.73	0.00	44.51
-279.17							
128	COMB1						
		0.00	5056.46	-328.65	13.72	0.00	41.45
-717.58							
		1.51	5056.46	-260.32	13.72	0.00	20.73
-272.80							
		3.02	5056.46	-192.00	13.72	0.00	0.00
68.80							
		4.53	5056.46	-123.68	13.72	0.00	-20.73
307.19							
		6.04	5056.46	-55.36	13.72	0.00	-41.45
442.40							
129	COMB1						
		0.00	5054.30	-55.35	14.29	0.00	43.16
107.97							
		1.51	5054.30	12.97	14.29	0.00	21.58
139.98							
		3.02	5054.30	81.29	14.29	0.00	0.00
68.80							
		4.53	5054.30	149.62	14.29	0.00	-21.58
-105.58							
		6.04	5054.30	217.94	14.29	0.00	-43.16
-383.16							
130	COMB1						
		0.00	4248.81	-293.21	-20.42	0.00	-61.70
-610.53							
		1.51	4248.81	-224.89	-20.42	0.00	-30.85
-219.27							
		3.02	4248.81	-156.56	-20.42	0.00	0.00
68.80							
		4.53	4248.81	-88.24	-20.42	0.00	30.85
253.67							
		6.04	4248.81	-19.92	-20.42	0.00	61.70
335.35							
131	COMB1						
		0.00	4248.27	-19.81	-20.88	0.00	-63.07
215.35							
		1.51	4248.27	48.52	-20.88	0.00	-31.54
193.67							
		3.02	4248.27	116.84	-20.88	0.00	0.00
68.80							
		4.53	4248.27	185.16	-20.88	0.00	31.54
-159.27							
		6.04	4248.27	253.49	-20.88	0.00	63.07
-490.54							
132	COMB1						
		0.00	5084.47	-253.15	16.19	0.00	48.92
-489.51							
		1.51	5084.47	-184.82	16.19	0.00	24.46
-158.76							
		3.02	5084.47	-116.50	16.19	0.00	0.00
68.80							
		4.53	5084.47	-48.18	16.19	0.00	-24.46
193.16							
		6.04	5084.47	20.15	16.19	0.00	-48.92
214.33							

133	COMB1	0.00	5085.19	19.98	15.79	0.00	47.70
335.54		1.51	5085.19	88.30	15.79	0.00	23.85
253.77		3.02	5085.19	156.63	15.79	0.00	0.00
68.80		4.53	5085.19	224.95	15.79	0.00	-23.85
-219.37		6.04	5085.19	293.27	15.79	0.00	-47.70
-610.73							
134	COMB1	0.00	4005.04	-217.46	-18.56	0.00	-56.06
-381.71		1.51	4005.04	-149.14	-18.56	0.00	-28.03
-104.86		3.02	4005.04	-80.81	-18.56	0.00	0.00
68.80		4.53	4005.04	-12.49	-18.56	0.00	28.03
139.26		6.04	4005.04	55.83	-18.56	0.00	56.06
106.53							
135	COMB1	0.00	4007.16	56.02	-17.59	0.00	-53.13
444.40		1.51	4007.16	124.34	-17.59	0.00	-26.57
308.19		3.02	4007.16	192.66	-17.59	0.00	0.00
68.80		4.53	4007.16	260.99	-17.59	0.00	26.57
-273.80		6.04	4007.16	329.31	-17.59	0.00	53.13
-719.58							
136	COMB1	0.00	2907.58	-184.04	9.90	0.00	29.89
-280.75		1.51	2907.58	-115.72	9.90	0.00	14.95
-54.38		3.02	2907.58	-47.39	9.90	0.00	0.00
68.80		4.53	2907.58	20.93	9.90	0.00	-14.95
88.78		6.04	2907.58	89.25	9.90	0.00	-29.89
5.57							
137	COMB1	0.00	2911.17	89.06	8.30	0.00	25.06
544.22		1.51	2911.17	157.39	8.30	0.00	12.53
358.11		3.02	2911.17	225.71	8.30	0.00	0.00
68.80		4.53	2911.17	294.03	8.30	0.00	-12.53
-323.71		6.04	2911.17	362.36	8.30	0.00	-25.06
-819.41							
138	COMB1	0.00	1169.64	-159.22	-7.02	0.00	-21.20
-205.79		1.51	1169.64	-90.90	-7.02	0.00	-10.60
-16.90		3.02	1169.64	-22.58	-7.02	0.00	0.00
68.80		4.53	1169.64	45.75	-7.02	0.00	10.60
51.30		6.04	1169.64	114.07	-7.02	0.00	21.20
-69.39							

139	COMB1	0.00	1173.01	114.25	-5.47	0.00	-16.53
620.32		1.51	1173.01	182.58	-5.47	0.00	-8.26
396.15		3.02	1173.01	250.90	-5.47	0.00	0.00
68.80		4.53	1173.01	319.22	-5.47	0.00	8.26
-361.76		6.04	1173.01	387.55	-5.47	0.00	16.53
-895.50							
140	COMB1	0.00	-442.13	-388.02	-4.74	0.00	-14.31
-896.94		1.51	-442.13	-319.70	-4.74	0.00	-7.15
-362.48		3.02	-442.13	-251.38	-4.74	0.00	0.00
68.80		4.53	-442.13	-183.06	-4.74	0.00	7.15
396.88		6.04	-442.13	-114.73	-4.74	0.00	14.31
621.76							
141	COMB1	0.00	-446.99	-115.35	-8.09	0.00	-24.43
-73.25		1.51	-446.99	-47.02	-8.09	0.00	-12.22
49.37		3.02	-446.99	21.30	-8.09	0.00	0.00
68.80		4.53	-446.99	89.62	-8.09	0.00	12.22
-14.97		6.04	-446.99	157.95	-8.09	0.00	24.43
-201.94							
142	COMB1	0.00	4283.82	-361.62	9.31	0.00	28.11
-817.20		1.51	4283.82	-293.30	9.31	0.00	14.06
-322.60		3.02	4283.82	-224.98	9.31	0.00	0.00
68.80		4.53	4283.82	-156.66	9.31	0.00	-14.06
357.00		6.04	4283.82	-88.33	9.31	0.00	-28.11
542.01							
143	COMB1	0.00	4280.17	-88.11	10.25	0.00	30.96
9.01		1.51	4280.17	-19.79	10.25	0.00	15.48
90.50		3.02	4280.17	48.53	10.25	0.00	0.00
68.80		4.53	4280.17	116.85	10.25	0.00	-15.48
-56.10		6.04	4280.17	185.18	10.25	0.00	-30.96
-284.19							
144	COMB1	0.00	3396.98	-330.31	-17.76	0.00	-53.64
-722.61		1.51	3396.98	-261.99	-17.76	0.00	-26.82
-275.31		3.02	3396.98	-193.66	-17.76	0.00	0.00
68.80		4.53	3396.98	-125.34	-17.76	0.00	26.82
309.71		6.04	3396.98	-57.02	-17.76	0.00	53.64
447.42							



145	COMB1						
	0.00	3395.14	-57.02	-19.01	0.00	-57.42	
102.94	1.51	3395.14	11.30	-19.01	0.00	-28.71	
137.46	3.02	3395.14	79.62	-19.01	0.00	0.00	
68.80	4.53	3395.14	147.95	-19.01	0.00	28.71	
-103.06	6.04	3395.14	216.27	-19.01	0.00	57.42	
-378.12							
146	COMB1						
	0.00	5335.11	-291.54	16.03	0.00	48.43	
-605.49	1.51	5335.11	-223.22	16.03	0.00	24.22	
-216.75	3.02	5335.11	-154.89	16.03	0.00	0.00	
68.80	4.53	5335.11	-86.57	16.03	0.00	-24.22	
251.15	6.04	5335.11	-18.25	16.03	0.00	-48.43	
330.31							
147	COMB1						
	0.00	5334.41	-18.36	16.14	0.00	48.76	
219.72	1.51	5334.41	49.96	16.14	0.00	24.38	
195.86	3.02	5334.41	118.29	16.14	0.00	0.00	
68.80	4.53	5334.41	186.61	16.14	0.00	-24.38	
-161.46	6.04	5334.41	254.93	16.14	0.00	-48.76	
-494.91							
148	COMB1						
	0.00	4443.50	-254.59	-20.68	0.00	-62.46	
-493.88	1.51	4443.50	-186.27	-20.68	0.00	-31.23	
-160.95	3.02	4443.50	-117.95	-20.68	0.00	0.00	
68.80	4.53	4443.50	-49.62	-20.68	0.00	31.23	
195.34	6.04	4443.50	18.70	-20.68	0.00	62.46	
218.70							
149	COMB1						
	0.00	4444.28	18.86	-20.40	0.00	-61.61	
332.16	1.51	4444.28	87.19	-20.40	0.00	-30.80	
252.08	3.02	4444.28	155.51	-20.40	0.00	0.00	
68.80	4.53	4444.28	223.83	-20.40	0.00	30.80	
-217.68	6.04	4444.28	292.16	-20.40	0.00	61.61	
-607.35							
150	COMB1						
	0.00	4280.14	-216.34	14.16	0.00	42.78	
-378.33	1.51	4280.14	-148.02	14.16	0.00	21.39	
-103.17	3.02	4280.14	-79.69	14.16	0.00	0.00	
68.80	4.53	4280.14	-11.37	14.16	0.00	-21.39	
137.57	6.04	4280.14	56.95	14.16	0.00	-42.78	
103.15							

151	COMB1	0.00	4282.26	56.77	13.19	0.00	39.86
446.66		1.51	4282.26	125.09	13.19	0.00	19.93
309.32		3.02	4282.26	193.41	13.19	0.00	0.00
68.80		4.53	4282.26	261.74	13.19	0.00	-19.93
-274.93		6.04	4282.26	330.06	13.19	0.00	-39.86
-721.84							
152	COMB1	0.00	2948.50	-184.79	-14.11	0.00	-42.62
-283.02		1.51	2948.50	-116.46	-14.11	0.00	-21.31
-55.51		3.02	2948.50	-48.14	-14.11	0.00	0.00
68.80		4.53	2948.50	20.18	-14.11	0.00	21.31
89.91		6.04	2948.50	88.50	-14.11	0.00	42.62
7.83							
153	COMB1	0.00	2952.06	88.69	-12.46	0.00	-37.64
543.11		1.51	2952.06	157.02	-12.46	0.00	-18.82
357.55		3.02	2952.06	225.34	-12.46	0.00	0.00
68.80		4.53	2952.06	293.66	-12.46	0.00	18.82
-323.15		6.04	2952.06	361.99	-12.46	0.00	37.64
-818.29							
154	COMB1	0.00	845.70	-158.85	3.02	0.00	9.12
-204.67		1.51	845.70	-90.53	3.02	0.00	4.56
-16.34		3.02	845.70	-22.21	3.02	0.00	0.00
68.80		4.53	845.70	46.12	3.02	0.00	-4.56
50.74		6.04	845.70	114.44	3.02	0.00	-9.12
-70.51							
155	COMB1	0.00	849.09	114.25	1.50	0.00	4.52
620.32		1.51	849.09	182.58	1.50	0.00	2.26
396.15		3.02	849.09	250.90	1.50	0.00	0.00
68.80		4.53	849.09	319.22	1.50	0.00	-2.26
-361.76		6.04	849.09	387.55	1.50	0.00	-4.52
-895.50							